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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,484	02/28/2002	Oh-Young Kim	2818-101	5671

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EXAMINER

GIBSON, ERIC M

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/019,484

Applicant(s)

KIM, OH-YOUNG

Examin r

Eric M Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 and 58-67 is/are rejected.
- 7) ☒ Claim(s) 55-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).
4. Claims 55-57 are objected to because of the following informalities:
 - a. In claim 55, line 3, "divided region" should be ~~divided regions~~.
 - b. Claims 56 and 57 are necessarily objected as being dependent upon an objected base claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-54 and 58-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1 recites the limitation "each portion" in line 3 and "each logic-division portion" in line 10. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of any "portions" of the vehicle to allow the Examiner to be able to ascertain the metes and bounds of the recited limitations.

b. Also regarding claim 1, the phrase "etc." at line 10 renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "etc."), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

c. Claim 2 recites the limitation "the depressed switches" in line 5. There is insufficient antecedent basis for this limitation in the claim.

d. Claim 3 recites the limitation "the on operation" in line 5. There is insufficient antecedent basis for this limitation in the claim.

e. As per claim 6, the parenthetical information contained at line 5 renders the scope of the claim indefinite because it is not clear whether or not the information contained within the parenthesis is intended to define or further limit the claim language.

f. Claims 4, 5 and 7-22 are necessarily rejected as being dependent upon a rejected base claim.

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g. Claim 23 recites the limitation "each portion" in line 3. There is insufficient antecedent basis for this limitation in the claim. There is no prior recitation of any "portions" of the vehicle to allow the Examiner to be able to ascertain the metes and bounds of the recited limitation.

h. Claims 24-54 are necessarily rejected as being dependent upon a rejected base claim.

i. Claim 58 recites the limitation "each portion" in line 3. There is insufficient antecedent basis for this limitation in the claim. There is no prior recitation of any "portions" of the vehicle to allow the Examiner to be able to ascertain the metes and bounds of the recited limitation.

j. Claims 59-67 are necessarily rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 10, 12, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bachman et al. (US004924418A).

- a. As per claim 1, Bachman teaches a vehicle monitor that includes switches (12, figure 1), control means (microprocessor 46, figure 2A), an instrument panel (14, figure 1), and an RPM pulse generating means (tachometer, column 8, line 51).
- b. As per claim 10, Bachman teaches a ROM for a systems operation program (column 6, lines 18-21) and a RAM for data processing (column 5, lines 45-47).
- c. As per claim 12, Bachman teaches software for the electrical system of the vehicle (column 6, lines 32-37).
- d. As per claim 22, Bachman teaches permanently stored code data in the control means for controlling the applications program (column 5, line 55 – column 6, line 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachman in view of Palalau et al. (US006373472B1).

- a. As per claim 2, Bachman teaches the invention as explained in the rejection of claim 1. Bachman does not teach remote switch means for allowing the panel switch means to be freely positioned. Palalau teaches a driver control interface system that includes remotely positioned switches on the steering wheel of the vehicle

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(see figure 1), in order to provide additional safety to the driver (column 3, lines 10-25).

It would have been obvious to one of ordinary skill in the art, at the time of invention, to include remotely positioned switches in the system of Bachman, in order to provide additional safety to the driver, as taught by Palalau.

Allowable Subject Matter

8. Claims 3-9, 11, 13-21, 23-54, and 58-67 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

a. As per claims 3, 6, 9, 11, and 13, the prior art does not teach or reasonably suggest in combination the claimed elements recited therein, including the panel switch means, remote switch means, switch control means, and auxiliary control means as claimed.

b. Claims 4, 5, 7, and 14-21 would serve to further define the invention of claims 3, 6 and 13 over the prior art.

c. As per independent claims 23 and 58, the prior art does not teach or reasonably suggest in combination including performing logic divisions of the vehicle into predetermined regions, performing digital conversion, analysis and integrated management according to the predetermined regions and detecting and controlling malfunctions in the regions.

d. Claims 24-54 and 59-67 would serve to further define the invention of claims 23 and 58 over the prior art.

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9. Claim 55 would be allowable if rewritten or amended to overcome the objection set forth in this Office action.

a. As per independent claim 55, the prior art does not teach or reasonably suggest in combination including performing logic divisions of the vehicle into predetermined regions, performing digital conversion, analysis and integrated management according to the predetermined regions and detecting and controlling malfunctions in the regions.

b. Claims 56 and 57 would serve to further define the invention of claim 55 over the prior art.

Conclusion

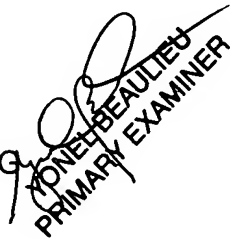
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Knapp (US006009360A) teaches an engine analyzer with real-time digital display. Hartman (US005916288A) teaches a multi-functional control switch arrangement. Schlichenmaier et al. (US005579235A) teaches a method of monitoring RPM sensors. Hermann (US005270689A) teaches a multi-function operating device. Govekar (US004980845A) teaches a digital engine analyzer. Blowers (US004580127A) teaches a circuit for converting analog bipolar signals to digital signals. Funk (US004419654A) teaches a tractor data center.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (703) 308-3873. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

EMG 
YONEL BEAULIEU
PRIMARY EXAMINER